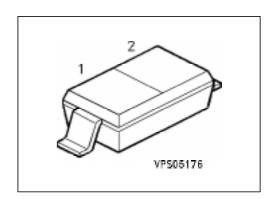
# **SIEMENS**

## **Silicon Variable Capacitance Diode**

**BB 620** 

• For Hyperband TV/VTR tuners, Bd I



Туре	Marking	Ordering Code (tape and reel)	Pin Configuration	Package <sup>1)</sup>
BB 620	red S	Q62702-B403	3 2 ○	SOD-123

### **Maximum Ratings**

Parameter	Symbol	Values	Unit	
Reverse voltage	$V_{R}$	30	V	
Forward current	IF	20	mA	
Operating temperature range	$T_{op}$	- 55 <b>+</b> 125	°C	
Storage temperature range	$T_{ m stg}$	- 55 <b>+</b> 150		

#### **Thermal Resistance**

Junction - ambient	Rth JA	≤ 450	K/W

<sup>1)</sup> For detailed information see chapter Package Outlines.

#### **Electrical Characteristics**

at  $T_A = 25$  °C, unless otherwise specified.

Parameter	Symbol		Values		
		min.	typ.	max.	
Reverse current $V_R = 30 \text{ V}$ $V_R = 30 \text{ V}$ , $T_A = 85 \text{ °C}$	IR	  -  -	_ _	10 200	nA
Diode capacitance $f = 1 \text{ MHz}$ $V_R = 1 \text{ V}$ $V_R = 28 \text{ V}$	Ст	62 2.9		76 3.4	pF
Capacitance ratio $V_R = 1 \text{ V}, 28 \text{ V}; f = 1 \text{ MHz}$	<u>Ст1</u> Ст28	19.5	_	25	-
Capacitance matching $V_R = 1 \text{ V} \dots 28 \text{ V}, f = 1 \text{ MHz}$	$\frac{\Delta C_{T}}{G}$	_	_	2.5	%
Series resistance $C_T = 30 \text{ pF}; f = 100 \text{ MHz}$	rs	_	1.3	_	Ω
Series inductance	Ls	_	2.8	_	nH

### Diode capacitance $C_T = f(V_R)$

*f*= 1 MHz

